Issuance Date:

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
BACKGROUND INFORMATION	2
DESCRIPTION OF THE FACILITY	2
History	
Industrial Processes	
Industrial Wastewater	2
Treatment Processes	2
PERMIT STATUS	3
Inspections	3
WASTEWATER CHARACTERIZATION	3
PROPOSED PERMIT LIMITATIONS	5
TECHNOLOGY-BASED EFFLUENT LIMITATIONS	5
EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS	5
MONITORING REQUIREMENTS	7
OTHER PERMIT CONDITIONS	7
REPORTING AND RECORDKEEPING	7
Prohibited discharges	7
DILUTION PROHIBITED	7
GENERAL CONDITIONS	8
PUBLIC NOTIFICATION OF NONCOMPLIANCE	8
RECOMMENDATION FOR PERMIT ISSUANCE	8
APPENDICES	9
APPENDIX A—PUBLIC INVOLVEMENT INFORMATION	9
APPENDIX B—GLOSSARY	
APPENDIX C—TECHNICAL CALCULATIONS	14
ADDENDIY D. DESPONSE TO COMMENTS	15

INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST 6075. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the Salmon Creek Wastewater Treatment Plant (the POTW) via the Hazel Dell Sewer District (HDSD). This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix D—Response to Comments.

	GENERAL INFORMATION						
Applicant	Kris Vockler						
Facility Name and Address	Industrial Control Development, Inc. (ICD) 13911 NW 3 rd Court, Suite 100 Vancouver, Washington 98685						
Type of Facility	Paints, Varnishes, Lacquers, Enamels and Allied Products [other than oilbase solvent paints]						
Standard Industrial Classification (SIC) Code(s)	2851						
Facility Discharge Location	Latitude: 45° 43' 23" N Longitude: 122° 40' 14" W						
Treatment Plant Receiving Discharge	Salmon Creek Wastewater Treatment Plant (the POTW) via Hazel Dell Sewer District (HDSD).						
	The POTW is located in the southwest corner of the state of Washington, just north of Vancouver. The POTW is an activated sludge plant. The final effluent is discharged to the Columbia River in accordance with National Pollutant Discharge Elimination System (NPDES) Permit No. WA0023639. The discharge location for the final effluent is at:						
	Latitude: 45° 44' 27" N Longitude: 122° 45' 25" W						

GENERAL INFORMATION				
Contact at Facility	Name: Kris Vockler Telephone #: 360-546-2286			
Responsible Official	Name: Kris Vockler Title: R&D Director Address: 13911 NW 3 rd Court, Suite 100 Vancouver, Washington 98685 Telephone #: 360-546-2286 FAX # 360-546-2287			

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

Industrial Control Development, Inc. (ICD) is not a significant industrial user or subject to Categorical Pretreatment Standards.

HISTORY

ICD is an existing facility already discharging to the Clark County/Salmon Creek Publicly Owned Treatment Works (POTW) via the Hazel Dell Sewer District (HDSD) sewer system. The ICD industrial wastewater discharge requires a State Waste Discharge Permit.

INDUSTRIAL PROCESSES

ICD produces high performance waterbased glass coatings using urethane, silicon, pigments and water in the production process. The facility operates 8 hours a day, 5 days a week, 52 weeks a year. The Standard Industrial Classification (SIC) Code applicable to production activities at the facility was reported to be 2851, Paints, Varnishes, Lacquers, Enamels and Allied Products [other than oil-base solvent paints].

INDUSTRIAL WASTEWATER

ICD produces a maximum of 37 gallons of industrial wastewater daily. The wastewater is discharged to the Clark County/Salmon Creek Publicly Owned Treatment Works (POTW) via the Hazel Dale Sewer District (HDSD) sewer system in batches once a week.

ICD discharges industrial wastewater from the OPACI-COAT-300® operation to Outfall 001. In the near future ICD will install a dispersion operation in a recently vacated area. It will produce maximum of 7 gallons of industrial wastewater daily. The wastewater from this operation will be filtered, adjusted for pH, and discharge via a new outfall (Outfall 002).

TREATMENT PROCESSES

The wastewater from the OPACI-COAT-300® operation is filtered and then collected in a 500-gallon storage tank. pH of wastewater is adjusted and wastewater is again filtered before being discharged to the HDSD sewer system once a week. Thirty (30)-micron and fifty (50)-micron filters are used. Solids and used filters are disposed at the landfill.

The wastewater from the Dispersion Mfg. operation is proposed to be collected in a storage tank and then filtered and adjusted for pH before being discharged to the HDSD sewer system. Fifty (50)-micron filters are proposed to be used. Solids and used filters are proposed to be disposed at the landfill.

Doug Arnold, HDSD Pretreatment Coordinator, takes wastewater samples to monitor the discharge twice a year. Currently a flow meter is not installed and the wastewater flow is being estimated. Kris Vockler estimates that the error is not higher that 5 percent of the total flow

PERMIT STATUS

An application for a permit was submitted to the Department on October 15, 2001, and accepted by the Department on October 25, 2001.

INSPECTIONS

The facility last received an inspection on August 30, 2001.

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the proposed wastewater discharge was reported in the permit application and is listed in the Table 1.

Table 1 Wastewater characterization

Parameter	Units Wastewater		Detection Limit	Local Limit	
5-day Biochemical Oxygen Demand (BOD ₅)	milligrams per liter (mg/l)	Not reported		240	
Chemical Oxygen Demand (COD)	mg/l	3,600	150		
Total Suspended Solids (TSS)	mg/l	2,300	20	300	
Total Dissolved Solids (TDS)	mg/l	3,000	20		
Conductivity	μmhos/cm	3,900	0.5		
Ammonia-N	mg/l	11	0.2		
рН	standard units (S.U.)	7.71		6.0-9.0	
Total Residual Chlorine	mg/l	<25	25		
Fecal Coliform	#/100 ml	<100			
Total Coliform	#/100 ml	57,940			
Dissolved Oxygen	mg/l	6.6	0.1		
Nitrate	mg/l	<1	1		
Nitrite	mg/l	1	1		

Parameter	Units	Wastewater	Detection Limit	Local Limit
Total Kjeldahl N	mg/l	40	0.2	
Ortho-phosphate-P	mg/l	<5	5	
Total-phosphate-P	mg/l	<5	5	
Total Oil and grease (total of petroleum and vegetable based)	mg/l	220	3	50
Total Petroleum Hydrocarbon		Not Reported		
Calcium	mg/l	22	0.05	
Chloride	mg/l	<10	10	
Fluoride	mg/l	<1	1	
Magnesium	mg/l	8.8	0.05	
Potassium	mg/l	6	1	
Sodium	mg/l	20	10	
Sulfate	mg/l	<10	10	
Arsenic	mg/l	< 0.24	0.24	0.1
Barium	mg/l	2	0.047	5.5
Beryllium	mg/l	Not reported		90
Cadmium	mg/l	< 0.005	0.005	0.3
Chlorine Demand	mg/l	Not reported		20
Chromium	mg/l	< 0.05	0.05	1.7
Copper	mg/l	0.3	0.24	2.2
Cyanide	mg/l	Not reported		0.2
Iron	mg/l	Not reported		10
Lead	mg/l	<0.1	0.1	0.4
Mercury	mg/l	< 0.0002	0.0002	0.05
Molybdenum	mg/l	< 0.001	0.001	
Nickel	mg/l	< 0.02	0.02	2.1
Selenium	mg/l	< 0.002	0.002	0.1
Silver	mg/l	< 0.01	0.01	0.1

Parameter	Units	Wastewater	Detection Limit	Local Limit	
Zinc	mg/l	< 0.005	0.005	2.3	
Phenols or Cresols	mg/l	Not reported		0.6	

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). The facility is not subject to existing federal categorical limitations under 40 CFR Part 405-471, and no AKART was established for the facility.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect Salmon Creek Wastewater Treatment Plant from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. These limitations are based on local limits established by HDSD and codified in ordinance, Table 2.

Table 2 Hazel Dell Sewer District local limits

Parameter	Units	Limits
рН	standard units	6.0-9.0
Total Suspended Solids (TSS)	milligrams per liter (mg/l)	300
5-day Biochemical Oxygen Demand (BOD ₅)	mg/l	240
Arsenic	mg/l	0.1
Barium	mg/l	5.5
Beryllium	mg/l	90
Cadmium	mg/l	0.3
Chlorine Demand	mg/l	20
Chromium	mg/l	1.7

Parameter	Units	Limits
Copper	mg/l	2.2
Cyanide	mg/l	0.2
Iron	mg/l	10
Lead	mg/l	0.4
Mercury	mg/l	0.05
Nickel	mg/l	2.1
Selenium	mg/l	0.1
Silver	mg/l	0.1
Zinc	mg/l	2.3
Phenols or Cresols	mg/l	0.6
Oil and grease (total of petroleum and vegetable based)	mg/l	50

Applicable limits for this discharge are listed in the Table 3.

Table 3 Discharge limits

Parameter	Units	Limits	Reason for limit
рН	standard units	6.0-9.0	Treated parameter; reasonable potential exists to exceed the local limit
Arsenic	mg/l	0.1	Reasonable potential exists to exceed the local limit
Barium	mg/l	5.5	Reasonable potential exists to exceed the local limit
Beryllium	mg/l	90	Not reported in the application
Cadmium	mg/l	0.3	Present in product
Chlorine Demand	mg/l	20	Not reported in the application
Copper	mg/l	2.2	Present in product
Cyanide	mg/l	0.2	Not reported in the application
Chlorine Demand	mg/l	20	Not reported in the application

Parameter	Units	Limits	Reason for limit
Cyanide	mg/l	0.2	Not reported in the application
Iron	mg/l	10	Not reported in the application
Lead	mg/l	0.4	Reasonable potential exists to exceed the local limit
Oil and grease (total of petroleum and vegetable based)	mg/l	50	Reasonable potential exists to exceed the local limit
Phenols or Cresols	mg/l	0.6	Not reported in the application

The Hazel Dell Sewer District may enter into special agreements with users for BOD₅ above 240 mg/l and TSS above 300 mg/l. For this reason the permit does not limit BOD₅ and TSS.

Pollutant concentrations in the proposed discharge will not cause problems at the receiving POTW such as interference, pass-through or hazardous exposure to POTW workers nor will it result in unacceptable pollutant levels in the POTW's sludge.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

Monitoring for BOD₅ and TSS is being required to further characterize the effluent.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 273-216-110 and 40 CFR 403.12 (e), (g), and (h)).

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. ICD is located in the Columbia River Gorge Water Quality Management Area (Basin 5) and is scheduled for permit renewal in the period July 1, 2002 through June 30, 2003. Therefore the Department proposes that the permit be issued with the expiration date of June 30, 2003.

APPENDICES

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on August 19, 2001, and August 26, 2001, in *The Columbian* to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on February 27, 2002, in *The Columbian* to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Industrial Permit Coordinator Department of Ecology Southwest Regional Office PO Box 47775 Olympia, WA 98504-7775

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (360) 407-6280, or by writing to the address listed above.

This permit was written by Jacek Anuszewski, P.E.

APPENDIX B—GLOSSARY

Ammonia—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring –Uninterrupted, unless otherwise noted in the permit.

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater

facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference— A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through— A discharge which exits the POTW into waters of the-State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Significant Industrial User (SIU)--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids—That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic

effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C—TECHNICAL CALCULATIONS

Parameter	Maximum effluent concentration measured	Detection limit	Local limits	Predicted maximum concentration	Is limit required?	Effluent _J va	percentile lue	Maximum effluent concentration used in calculations		cient of ation	# of samples taken	Multiplier	Dilution factor
	mg/L	mg/L	mg/L	mg/L			Pn	mg/L	CV	S	n		
Total Oil and grease (total of petroleum and vegetable based)	220	3	50	1364	YES	0.95	0.050	220	0.60	0.55	1	6.20	1
Arsenic	< 0.24	0.2400	0.1000	1.49	YES	0.95	0.050	0.24	0.60	0.55	1	6.20	1
Barium	2.00	0.0470	5.5000	12.40	YES	0.95	0.050	2.00	0.60	0.55	1	6.20	1
Cadmium	< 0.005	0.0050	0.3000	0.03	NO	0.95	0.050	0.005	0.60	0.55	1	6.20	1
Chromium	< 0.05	0.0500	1.7000	0.31	NO	0.95	0.050	0.05	0.60	0.55	1	6.20	1
Copper	0.30	0.2400	2.2000	1.86	NO	0.95	0.050	0.30	0.60	0.55	1	6.20	1
Lead	<0.1	0.1000	0.4000	0.62	YES	0.95	0.050	0.10	0.60	0.55	1	6.20	1
Mercury	< 0.0002	0.0002	0.0500	0.00	NO	0.95	0.050	0.0002	0.60	0.55	1	6.20	1
Nickel	< 0.02	0.0200	2.1000	0.12	NO	0.95	0.050	0.02	0.60	0.55	1	6.20	1
Selenium	< 0.002	0.0020	0.1000	0.01	NO	0.95	0.050	0.002	0.60	0.55	1	6.20	1
Silver	< 0.01	0.0100	0.1000	0.06	NO	0.95	0.050	0.01	0.60	0.55	1	6.20	1
Zinc	< 0.005	0.0050	2.3000	0.03	NO	0.95	0.050	0.005	0.60	0.55	1	6.20	1

APPENDIX D – RESPONSE TO COMMENTS

No comments received.